Network Working Group
Request For Comments # 309
NIC # 9260

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MIT-MAC

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DATA AND FILE TRANSFER WORKSHOP ANNOUNCEMENT

MIT will host a workshop on Data and File Transfer, Friday, April 14 and Saturday, April 15, 1972. People have expressed an interest in revising the existing ARPANET Data and File Transfer Protocols (RFC # 264 and RFC # 265), to make them more suitable to fulfill the now better understood ARPANET requirements.

The objective of this workshop is to arrive at a unified convention for ARPANET data and file transfer. It is important that we adequately consider the needs of TIP users, DATACOMPUTER users, remote job entry users, and the major ARPANET service systems.

In addition to the current members of the data and file transfer protocol committee, I have invited a number of interested parties to talk and participate in this workshop. On the first day's agenda is a list of speakers who have agreed to discuss their respective interests in data and file transfer. If your interests have not been represented and you would like to give a presentation or discuss a specific area, please contact me (617-864-6900 Ext. 1428).

Participants are encouraged to have written position papers ready at the time of this meeting. If possible, these papers should be distributed as NWG/RFC's or informal notes to workshop invitees, prior to the workshop.

As this meeting is intended to be an intensive workshop, with the second half devoted to a detailed specification of protocol, it will be necessary to limit attendance. The attendance to this meeting is by invitation only. A list of invitees is attached. If you have not been invited, and would like to attend the workshop, please contact me.

Hotel reservations may be made at Random House, operated by MIT's Real Estate office ($5.00 to $7.00/night), by contacting either me or Sue Pitkin (617-864-6900 Ext. 1450) before March 31st. If you would prefer other hotel accomodations instead, a convenient hotel is the Fenway Motor Hotel (Tel. 617-492-4777).

Please contact either me or Sue Pitkin if you intend to come.

AGENDA

FRIDAY April 14th, 1972

8th Floor Conference Room, MIT Project MAC,
545 Technology Square, Cambridge, Mass.

Morning Session -- 9:00 a.m.

LIST OF SPEAKERS

Steve Crocker -- ARPA
Keynote Address and General Discussion

Richard Winter -- CCA
The DATACOMPUTER and ARPANET Protocols

William Crowther -- BBN-NET
Data and File Transfer to Terminal IMPs

Robert T. Braden -- UCLA-CCN
Remote Job Service on ARPANET -- A Server Viewpoint

John Heafner -- RAND
Remote Job Service on ARPANET -- A User Viewpoint

(LUNCH)

Afternoon Session -- 1:30 pm.

Ray Tomlinson -- BBN-TENEX
The TENEX View and Experience with "CPYNET"

Abhay Bhushan -- MIT-MAC
Current Data and File Transfer Strategies and
Some Measurement Results.

GROUP DISCUSSION OF DATA TRANSFER PROTOCOL

Discuss revision and specific changes to the existing data transfer protocol (RFC 264). See tenetative discussion items for DTP on page 4. You are expected to have read RFC 264 and be familiar with it.

GROUP DISCUSSION OF FILE TRANSFER PROTOCOL

Discuss revision and specific changes to the existing file transfer protocol (RFC 265). See tenetative list of discussion items on page 4. You are expected to have read RFC 265 and be familiar with it.

AGENDA (Cont.)

SATURDAY April 15, 1972

8th Floor Conference Room, MIT Project MAC,
545 Technology Square, Cambridge, Mass.

Morning Session -- 9:00 a.m.

WORKING SESSION ON DATA AND FILE TRANSFER PROTOCOLS

Objective is to come up with revised specifications for data and file transfer protocols that fulfill current (existing and anticipated) ARPANET needs. A unified approach is a desirable goal to strive for.

Continuation of Friday's discussion of data and file transfer protocols, incorporating specific ideas and changes in the existing protocols.

Possible formation of a sub-committee whose task is to write the revised specificaitons for DTP and FTP.

Afternoon Session -- 1:30 pm.

(TO BE DECIDED)

Tentative List of Items for Discussion

Data Transfer Protocol (DTP)

- DTP vs TELNET. Concept of extended TELNET, or allowing use of ASCII in DTP.
- Error Control and recovery in DTP (use of error checks, restart, etc.)
- Modes available -- handshake, only one mode, or use of default.
- Information separator, Aborts, and the Use of Close (NCP-CLS) to Separate Information.
- Use of DTP with TIPs
- Use of DTP with DATACOMPUTER

File Transfer Protocol (FTP)

- Use of ICP, inter-mixing data and control, transferring files to third connections (possibly to different sites)
- The command language ASCII or codes
- Handling of data types and physical storage.
- Handling of descriptors and logical structure
- Error control and error recovery
- Use of FTP with TIPs
- Use of FTP with DATACOMPUTER
- Uniform Pathnames and the ARPANET virtual file system.

List of Invitees

R. T. Braden -- UCLA-CCN , A. Chan -- MIT-DMCG , S. D. Crocker -- ARPA , W. Crowther -- BBN-TIP , E. Harslem -- Rand , J. Heafner -- Rand , A. McKenzie -- BBN-NET , J. Melvin -- SRI-ARC (NIC) , E. Meyer -- MIT-MULTICS , J. Postel -- UCLA-NMC , N. Ryan -- MIT-MULTICS , M. Seriff -- MIT-DMCG , R. Sundberg -- Harvard , R. Tomlinson -- BBN-TENEX , R. Watson -- SRI-ARC (NIC) , J. White -- UCSB , R. Winter -- CCA

Suggested Reading

It is recommended that prior to the workshop, attendees read the following papers. This will greatly enhance the success of the workshop.

1. The Data Trnasfer Protocol, NWG/RFC # 264
2. The File Transfer Protocol, NWG/RFC # 265
3. The Use of "Set Date Type" Transaction in File Transfer Protocol, A. Bhushan, NWG/RFC # 294
4. Using ARPANET Remote Job Entry, E. Harslem, NWG/RFC # 3Ø7
5. NETRJT -- Remote Job Service Protocol for TIPs, R. T. Braden, NWG/RFC # 283
6. Interim NETRJS Specifications, R. T. Braden, NWG/RFC # 189
7. User's View of the DATACOMPUTER, R. Winter, NWG/RFC # 219
8. Data Language, CCA, NIC # 8208
9. A Suggested Additon to File Transfer Protocol, A. McKenzie, NWG/RFC # 281
1Ø. Revision of the Mail Box Protocol, NWG/RFC # 278
11. Some Experience with File Transfer, H. Brodie, NWG/RFC # 269
12. ARPANET Specifications for UCSB's Simple-Minded File System, J. White, NWG/RFC # 122

(In addition please also read any of the position papers distributed prior to the workshop.)